

Listing of Claims:

Claims 1-55 cancelled.

56. (Presently Amended) A method for synthesizing a polymer array on a substrate comprising the steps of:

- a) forming providing a surface having one or more synthesis intermediates bound thereon, the synthesis groups intermediates having a reactive group protected from reaction by a photosensitive protecting group;
- b) coating said surface with a substance comprising a photobleachable compound ~~or group~~
- c) irradiating at least a part of said surface to:
 - i) bleach said photobleachable compound; and
 - ii) remove said protective group;
- d) removing said substance from said surface;
- e) reacting a subsequently added synthesis intermediate with the unprotected reactive group, the subsequently added synthesis intermediate having a reactive group protected from reaction by a protective group;
- f) recoating said surface with a substance comprising a photobleachable compound ~~or group~~ if another synthesis intermediate is to be added; and
- g) repeating steps b) through f) or not, until a the desired polymer array sequence is obtained.

Claims 57-59 are cancelled.

60. (Presently Amended) The methods of claims 56 and 57 wherein said synthesis intermediate is a nucleotide.

61. (Withdrawn) The methods of claims 56 and 57 wherein said synthesis intermediate is a polynucleotide.

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62. (Withdrawn) The methods of claims 56 and 57 wherein said synthesis intermediate is an amino acid.

Claim 63 is cancelled.

64. (Presently Amended) The methods of claims 56 and 57 wherein said photobleachable compound is a photobleachable dye.

65. The method of claim 64 wherein said photobleachable dye is pyrylium dye or diazonium dye.

Claims 66-79 are cancelled.

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